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ABSTRACT

During the last decade, great strides have been made in the enrollment of black youth in colleges and universities. Despite these gains, at least two concerns remain. First, enrollment rates of black and white youth are not yet equal. Second, the retention rate among blacks who enroll is lower than that of white students. A longitudinal study of black youth, beginning with the senior year of high school and extending over a four year period, was conducted to examine the factors leading to entrance and retention in higher education. The study examines the attitudes, perceptions, and other nonacademic indicators that students had in high school as predictors of later educational attainment. In their senior year of high school, 140 black youth were questioned, and two and four years later, as many as could be located were again contacted. Sense of personal control, academic and application skills, educational aspirations, and parental expectations were measured. The findings support the following: (1) some of the factors that predict academic performance also predict educational attainment and retention in postsecondary eduation: (2) characteristics of black youth during their high school years predict later educational attainment; and (3) nonacademic indicators can be used to predict educational attainment among black youth. The nonacademic predictors considered important in this study included aspirations and expectations, self-perceptions, and others' perceptions. (Author/RLV)

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BLACK YOUTH AND HIGHER EDUCATION:

A LONGITUDINAL STUDY

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During the last decade, great strides have been made in the enrollment of black youth into the nation's colleges and universities. Despite these gains, at least two concerns remain. First, the enrollment of black youth has not yet achieved parity with that of white youth (U. S. Department of Commerce, 1978). Therefore it is likely that some blacks who have the potential and desire to continue their education beyond high school are still not doing so. A second concern is the retention rate among those black youth who do enroll in college. More than half (59%) of the black college students leave before graduating compared to 43% of the white students (Chronicle of Higher Education, 1975).

The present study is a longitudinal observation of black youth that begins with the senior year in high school and extends over the four year period immediately following high school graduation. In general, the focus of the study is on entrance and retention in higher education. Specifically, the following questions will be addressed:

(1) who enters higher education and who does not?

(2) who stays in higher education and who withdraws? What are the characteristics that distinguish those who begin postsecondary education and stay versus those who enter but withdraw?

A fair amount of research about black youth and educational achievement has been conducted during recent years. However, one could argue that much of the research has three biases. One bias in that research is that many of these studies have used grade point average or other performance indicators as the criterion (Epps, 1969; DiCesare et al., 1972; Hayes & Franks, 1975; Jorgenson, 1978; Rosenthal & Jacobsen, 1968a). Obviously, in studying college students, this approach would exclude those who leave and, therefore, would do little to increase our understanding of college attrition rates. Thus, a more appropriate indicator for college students might be retention. The present study is extending past research by investigating whether the same variables that the literature suggests

predict performance also predict who will enter and stay versus who will enter and withdraw.

A related bias of past research on predicting academic success among black youth is that it has focused upon identifying academic predictors of performance such as high school GPA, SAT scores, and scores on other standard tests (Stanley, 1971; Thomas and Stanley, 1969). A number of researchers (Clark and Plotkin, 1964; Green & Farquhar, 1965; Cleary, 1968; Pfeifer & Sedlacek, 1970, 1971, 1974) have found that these standard academic measures do not predict the achievement among black college students as well as they predict achievement among white college students. This evidence led Sedlacek (1974) to argue that our understanding of black youth and higher education can be enhanced by also examining nonacademic predictions of academic success. Thus, the present study sought to identify nonacademic predictors of educational attainment.

Those who have studied non-academic predictors of academic performance have produced evidence that aspirations (Franklin, 1963; Epps, 1969), expectations (Epps, 1969) self-concept of ability (Epps 1969; Brookover, 1967), sense of control over outcomes (Franklin, 1970), and others' expectations for them (Rosenthal & Jacobsen, 1968b) are related to academic performance. Also, there is evidence in addition to the research on the academic performance that individuals are more likely to perform if they think that their skills in areas related to the task are good than if they think their skills are not so good (Feather, 1968).

A third bias in the research is that those studies that have investigated variables related to academic achievement have mainly focused on the effects of characteristics that the students have at the same time their academic performance is being measured. Another, equally justifiable, approach is to examine the effects

of perceptions that black youth have as they anticipate college and, thus, take to college with them. This approach may help us both to understand why some students do not enter and, also, to understand better the attitudes that those who do enter take to college with them. This approach allow us to answer different questions about retention than data collected after entrance because of the likelihood that students change their attitudes, perceptions, etc. in accordance with their initial experience in higher education. The present study examines the attitudes, perceptions, and other non-academic indicators that students had in high school as predictors of later educational attainment.

METHODS

Subjects

The subjects were 140 black youth who were seniors in an inner city high school at the beginning of the study. 64 males and 75 females were included in the sample (one subject left this item blank).

Procedure

The subjects were asked to complete the initial questionnaire as part of another study involving the evaluation of counseling programs for black high school seniors (Burlew, 1979). However, students completed the questionnare at the beginning of the school year prior to any of the activities of the counseling program.

The questionnaire was administered in small groups of approximately 15 students. The questionnaire was introduced as a set of questions concerning issues facing Blacks today.

The next autumn, students were contacted by mail and asked to complete a short form indicating their immediate plans. Those who did not respond were

contacted by telephone to determine their plans. 119 subjects were able to be contacted by one of the two methods.

Two years after graduation, subjects were again contacted by mail and asked to complete a short form indicating their educational status. This time, as an incentive to respond, subjects were informed that their names would be included in a raffle if they responded and that there would be monetary prizes for two second place winners and one first place winner. Subjects who did not respond received a second letter and, if needed, a follow-up telephone interview. This time, 97 subjects were contacted by one of these methods. All respondents received an announcement of who had won the raffle.

Four years after graduation, subjects were again contacted by mail. A raffle was also included in this phase, and, again, an effort was made to interview non-respondents by phone. In addition, three college students who had been members of that graduating class were research assistants and had the responsibility of contacting class members. Eighty-eight were able to be contacted during this phase.

Measures

The questionnaire included several already existing measures as well as measures designed especially for this study. All new measures were pretested for clarity. The Educational Expectation measure by Epps (1969) was used to determine the general educational expectancy. This one-item measure asked subjects to indicate the education they expect to attain. The eight alternatives ranged from "I think I will quit school as soon as I can" to "I think I will graduate from college and go on to graduate school." In addition, subjects were asked to indicate both their expectancies of college admission and success. The possible responses included no chance at all, slight chance, good chance,

and very good chance.

Two scales were included to measure the sense of personal control. The Gurin modification of the Rotter scale contains four factors (Gurin et al, 1969). Only two of these factors were used here. This included the personal control factor and the control ideology factor. The Intellectual Achievement Responsibility Scale (IAR) developed by Crandall et al. (1965) was used to measure sense of control over academic outcomes. The IAR scale includes two subsets--sense of control over academic successes and sense of control over failures.

To measures students' assessment of their academic and application skills, students were asked to evaluate their own test-taking skills as well as their skills for completing college applications. The possible responses were very poor, improvement needed, average, above average and very good.

Educational aspirations were measured using the same format as the educational expectation measure. However, the educational expectation measure asked students to indicate how far they expected to continue their education while the educational aspiration measure asked students to indicate how far they would like to continue their education if they could continue their education as far as they liked. Students were also asked to indicate the occupation they planned to pursue. These occupations were also given a prestige rating according to the Duncan NORC Prestige Index.

Finally, subjects were asked to estimate the amount of education their mothers expected them to acquire. Responses here also varied from "quit right now" to "graduate from college and then go on to graduate school."

Data Analysis

Some data being presented here on what actually happened to the students is descriptive in nature. However, discriminant analysis was used to test the

hypothesis that a set of variables accurately predicts who would be and who would not be in school the following autumn and two years later. A separate analysis of the change in Rao's V for each independent variable in the set tested whether that particular variable contributed to the model's predictive capability. There were two dependent variables in this analysis. These included whether the individual was or was not involved in postsecondary education the next autumn after graduation from high school and, again, two years later. The discriminant analyses for each of these independent variables was done separately. The independent variables were those attitudes, expectations, and perceptions expressed by the individual students during their senior year in high school.

Results

The autumn after high school, 72 (60.5% actually participated in some form of postsecondary education and 47 (39.5%) did not. 21 could not be located to determine their status.

TABLE 1

Participation in Postsecondary Education
Immediately After High School

		N	%
I.	Did not participate in postsecondary education	47	39.5
II.	Participated in postsecondary education	72	60.5
		N	%
	a. On-the-job training	1	1.4
	b. Skills training program or school	2	2.8
	c. Two-year college	24	33.3
	d. Four-year college or university	45	62.5
		72	100.00
		119	100.0%

Predictors of Immediate Entry

The set of variables that best predicted who would be and who would not be involved in higher education the autumn following graduation included the following variables: educational aspirations, expectancy of admission into college, occupational aspirations, sense of control over academic outcomes, perceived ability to complete college application process, mother's educational expectancy, and perception of test-taking skills. This set significantly distinguished between those who did and did not enter higher education the following autumn (Wilks Lambda = .59, F = 7.53, df = 7,79, p = .001). 78.16% of the subjects were accurately classified as in or out of school by this set. The subsequent Rao's V analyses indicated that six of the variables actually contributed to the predictive powers of the set. Those students who went on to school aspired to continue their education further (change in Rao's V = 24.16, df = 1, p = .001), expected to be admitted into college (change in Rao's V = 4.05, df = 1, p = .04), and aspired for more prestigious jobs than those who did not go on (change in Rao's V = 4.84, df = 1, p = .028). Those who went on felt more control over their academic outcomes than those who did not. However, the two groups differed only on their willingness to accept responsibility for their failures (change in Rao's V = 6.83, df = 1, p = .009) but not their successes. Those who went on were also more confident of their skills for completing the college application process than those who did not (change in Rao's V = 5.81, df = 1, p = .016). Those who went on also perceived that their mothers expected them to attain more education than those who did not (change in Rao's V = 8.48, df = 1, p = .004). The two groups did not differ on their perceptions of their test-taking skills (p = .115).

Enrollment after two and four years

97 from the original group could be located after 2 years. 46.7% of these

individuals were in school after two years.

TABLE 2

Enrollment After Two Years

	N	%
In school	44	46.7
Not in school	53	53.3
	97	100.0%

88 students could be located after four years. Of these, only 14.7% were still in school:

TABLE 3

Enrollment After Four Years

	N	%
Enrolled in school	13	14.7
Not enrolled in school	75	85.3
	88	100.0%

What happened to those who went?

55 of those 72 who initially went on to school could be contacted after two years to determine their educational status. 61.8% were still in school.

TABLE 4

Enrollment Among Initial Entrants After Two Years

	N	%
Still enrolled	34	61.8
No longer enrolled	21	38.2
	53	100.0%

53 of those 72 who initially went on to higher education could be located after four years. Of these, only 18.9% were still enrolled.

TABLE 5

Enrollment Among Initial Entrants After Four Years

Still enrolled	10	18.9
No longer enrolled	43	81.1
	53	100.0%

Predictors of Retention

The set of variables that best predicted who, among those who entered some form of higher education immediately after high school, would and would not still be enrolled two years later included educational aspirations, occupational aspirations and personal control. This set significantly distinguished between those who were and were not still enrolled in school (Wilks Lambda = .7039, F = 6.02, df = 3,43, p = .0016). 70% of the students could be correctly classified using this set as predictors. Further analyses suggested that two of these variables contributed significantly to the predictability of the model but a third did not. Those who were in school after two years had higher occupational aspirations (change in Rao's V = 9.173, df = 1, p = .002), and also sensed more control over their outcomes (change in Rao's V = 8.018, df = 1, p. = .004). It should be noted that students who were and were not still in school differed only on the personal control items of the Rotter scale but not on the control ideology items. The two groups did not differ on educational aspirations (p = .1875).

No discriminant analysis was done to determine the predictors of who would still be in school four years later because of the small number still enrolled.

Discussion

The findings generally support the three broad predictions mentioned at the beginning of this article. First, the findings suggest that some of the factors that predict academic performance also predict educational attainment and retention in postsecondary education. Furthermore, the study provides evidence that the characteristics of Black youth during their high school years predict later educational attainment. Finally, the findings also support the point of view that non-academic indicators can be used to predict educational attainment among black youth.

60.5% of the black students in the study actually did enter some form of higher education. This supports other evidence that black youth are entering postsecondary education in increasing numbers. First, although our data supports other data suggesting that black students are increasingly enrolling in colleges and universities, almost two-fifths of those who initially enrolled were no longer in school two years later and very few were still enrolled after four years. This finding supports the earlier assertion that retention continues to remain a serious problem among black youth.

The need for more research on retention is an obvious conclusion of this study. Some researchers have already begun to examine barriers that black students experience in the transition from high school to college. Elkind (1971) argues that black students experience several discontinuities between high school and college including the absence of social promotions in college as in some high schools and that the high school culture at least in inner-city schoolsas the school in this study may have been dominated by black majority but the white college is dominated by the culture of the white majority. Others have suggested

that financial pressures (Westbrook et al. 1978), poor study habits (Westbrook et al, 1978), mistrust between faculty and students (Willie & McCord,1972), the lack of opportunities for involvement in campus activities (Centra, 1970), and marginal involvement in dating and social life (Centra, 1970) all interfere with the progress of the black student in college.

A set of nonacademic measures ended up predicting entrance and retention in postsecondary education. This finding offers further support to the theory of Sedlacek (1974) that nonacademic indicators such as attitudes and perceptions may be more important predictors of educational outcomes for black youth than traditional academic predictors.

The nonacademic predictors that turned out to be important in this study can be grouped into three categories including aspirations and expectations, self-perceptions, and others' perceptions. Some of the variables were predictors of entrance but not retention. In these cases, the findings should not be interpreted to mean that these variables are not also important for retention. Rather, the analysis plan was such that only those who initially entered were included in the analyses on retention. This approach leads to a homogeneous group on certain characteristics, e.g. aspirations and, thus, no initial differences were found between those who stayed and those who did not because members of both groups possessed those characteristics common to those entering. Sometimes, however, variables were both predictors of entrance and retention. In these cases, although those who stayed and those who dropped out were more similar to each other than to those who did not go at all, there must have been enough differences between those who entered and stayed and those who entered and dropped out to further subdivide them.

Apparently, one important element in participation in postsecondary education

is to aspire to continue one's education further and to want a prestigious job. Students with high educational and occupational aspirations were more likely to continue their education than those with low aspirations. This evidence suggests the need to explor further the socialization of aspirations. Many who have examined aspirations have treated them as the byproducts of some cultural transmission of values. However, it is plausible that youth change their aspirations as they are exposed to new alternatives. If so, this suggests that aspirations are simply a reflection of the exposure or lack of exposure of youth to certain alternatives. This latter idea would argue for the increased exposure of black youth to higher educational and prestigious job settings so that they might consider these as viable alternatives when making decisions about education and career.

Educational aspirations turned out to be an important predictor of entrance into higher education but occupational aspirations turned out to be an important predictor of both entrance and retention. This difference suggests that while it may be important to want to go to college, one is more likely to stay if that educational aspiration is coupled with the desire for an especially prestigious job that requires a great deal of education. Otherwise, one may lose interest in the educational goal and have no occupational end to sustain the motivation to continue.

Along with what one likes to do, it apparently is also important what one expects to do. Those students who expected to be admitted were more likely to enter than those who had lower expectations. Actually, two other expectancies were included in this investigation--expectancy of success once in school and the amount of education expected. It was somewhat confusing that only one of these expectancies, expectancy of success in college, turned out to be an

important predictor of participation in postsecondary education. However, it might be argued that educational behavior is more closely tied to expectations about immediate events than to later events or tasks. That is, decisions students make about education would be more closely tied to expectations early in the educational process (e.g. can I do the course work?) than to expectations about later steps (e.g. can I graduate?) This same explanation may be useful in understanding why students who were more confident in their ability to complete the application process were more likely to enter than those who were not as confident. For, in some ways, the expression of confidence about the application process may also be an expression of the likelihood of being successful at the first step i.e., getting in. This rationale is consistent with the work of Atkinson and his associates (Atkinson, 1968; Raynor, 1969) which shows that individuals make predictions about success at each step in a series of tasks leading to a desired goal and that, among individuals who have some doubts about their likelihood of achieving the final goal, their expectations about their success at the earlier steps are more predictive of their performance than their expectations about their success at later steps.

Self-perceptions also turned out to be important in the educational retainment of black youth. It has already been mentioned that black youth who entered were more confident that they had the skills to complete the sometimes overwhelming application process than those youth who did not enter. In addition, sense of control was a predictor of both immediate entry into postsecondary education following high school and, also, retention after two years. However, it is interesting to note that different aspects of one's sense of control were relevant for entrance than for retention. The important issues at entrance was control over academic outcomes, specifically control over failure. This finding suggests that the major concern related to control that students consider

when entering is failure and one's control over preventing this from occurring. Those youth who think they can control failures are more likely to enter while those who believe the control of failure is out of their hands apparently are reluctant to enter at all. The sense of responsibility for success did not turn out to be important, which may suggest that, if success occurs, it does not matter to the youth why or who is responsible.

The important issues related to control for retention was the sense of control over one's outcomes in general. This suggests that students are more likely to stay in postsecondary education if they think they have control over failure and they think they can use the skills or credentials they are working hard to attain to achieve their personal life goals. Those who are not certain that they control their outcomes may wonder about the worth of continuing their education if their fate is out of their hands anyway. It is also worth noting that retention was related only to the personal control factor but not the control ideology factor. This finding supports the findings of others that Blacks are more likely than Whites to make distinctions between what works for people in general in this society and what works for them individually. Gurin et al (1969) argue that their control ideology factor measures the former while their personal control ideology measures the latter. Research by Gurin et al (1969) as well as other researchers (Lao, 1970; Jorgenson, 1978) has shown that the behavior and performance of Blacks is more closely tied to personal control ideology than control ideology. This may explain why the present study found personal control to be an important predictor of educational outcomes but not control ideology.

The present study also provides evidence that the expectations of others

are also an important element in determining educational outcomes. Mothers were the specific significant others in the present study. This finding suggests that mothers who expect more (educationally) from their children get more. It is also possible that high educational expectations by mothers are more likely than low educational expectations to be coupled with support from the mother to enter postsecondary education. This support is likely to be continued throughout the course of postsecondary education if given initially. This may explain why the expectations of mothers distinguished between who did and did not enter initially but did not distinguish among those who were and were not participating two years later among those who initially went because mostly all these mothers were supportive.

Before closing, several aspects of the research merit further discussion. First, the fact that very few students were still in school after four years was a disheartening discovery. This reality, however, further supports the contention made earlier that there is a need to focus on the retention of black students once enrolled in higher education.

One might also worry about the effects of the loss of subjects on the findings. Obviously, the major concern with the loss of subjects is whether a special group might be overrepresented among the respondents. First, it should be mentioned that every effort was made to track down every one of the initial subjects after two and after four years. The use of graduates from that class as research assistants was implemented to locate as many initial participants as possible. As in most longitudinal studies, this still did not prove to be possible. Also, one intent of the raffle was to reduce the likelihood that students who were proud of what they were doing (e.g. in school) would be more likely to respond. In fact, this strategy seems to have worked since more than half of the respondents

after two and after four years were not in school.

In conclusion, the above findings suggest that nonacademic characteristics of black high school students are related to postsecondary educational outcomes. This certainly has implications for those who conduct research related to post-secondary education among Blacks and colleges that face problems related to the entrance and retention of black students. However, the data also has implications for high school counselors and officials who are charged with the responsibility for educating and counseling students in such a way that the numbers of life options students consider and are prepared (educationally and perceptually) to be successful at are increased. The data suggests that high school personnel concerned with developing the perception in their students that college is a real alternative should emphasize the development of high educational and occupational aspirations as well as the development of high expectations of being admitted into higher education. Counselors should also offer support and bolster self-confidence in completing the application process as well as foster a sense of control over both educational and more general outcomes. In addition, parents must be educated to be sensitive to the impact of the expectancies they communicate to their youth. A discussion of counseling strategies and other activities related to these findings is beyond the scope of this paper. However, the reader is encouraged to read work published elsewhere by this author on evaluating such interventions (Burlew, in press).

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